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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/996,946	11/30/2001	Tacko Hayase	0445-0313P	3991

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EXAMINER

COLE, ELIZABETH M

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 12/06/2002

15

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/996,946	HAYASE ET AL.	
	Examiner	Art Unit	
	Elizabeth M Cole	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 13-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>12</u> . | 6) <input type="checkbox"/> Other: _____ |

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1. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, it is not clear what is meant by “a large number of tips” for the reasons set forth in the previous Office action. Applicant’s arguments that the specification teaches that the number of tips should be sufficient for scouring or scraping properties against dirt on a soiled surface have been considered. However, the rejection has been maintained because the phrase “large number” implies a particular value or at least a minimum value and the specification is not clear as to what that value would be. With regard to the preferred ranges, limitations from the specification are not read into the claims.

2. Claims 1, 3-8, 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al, EP 0,926,288 in view of Laun, U.S. Patent No. 6,087,279. Kobayashi et al discloses a sheet material comprising cellulosic fibers and thermoplastic fibers which are present in the claimed proportions. The thermoplastic fibers may have the claimed length. The sheet may be embossed. The cellulosic fibers and thermoplastic fibers are hydrentangeld. Since the fibers are not bonded using bonding agents, presumably the tips of the fibers at the surface of the fabric would be exposed and would have the capability of scouring or scraping dirt off of a surface. Kobayahsi et al differs from the claimed invention because Kobayashi does not disclose the claimed dtex. Laun teaches at col. 3, lines 1-17, that using coarser fibers as the thermoplastic fibers in a fabric comprising both thermoplastic and cellulosic fibers such as cotton enhances the

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cleaning ability of the fabric. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed fibers having a dtex as taught by Laun as the thermoplastic fibers in Kobayashi et al. One of ordinary skill in the art would have been motivated to employ the coarser fibers as taught by Laun in order to enhance the cleaning ability of the fabric. With regard to the number of tips, it would have been obvious to have optimized the number of the thermoplastic fibers which are present on the surface of the cleaning sheet since the thermoplastic fibers are included in the fabric in order to enhance the ability of the fabric to clean.

3. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi in view of Laun as applied to claims 1, 3-8, 13-16 above, and further in view of JP 2000212866.

Kobayashi does not teach employing conjugate fibers or crimped fibers as the thermoplastic fibers. JP 200212866 teaches that such crimped conjugate fibers enhance the bonding of the cellulosic fibers within the sheet. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed a crimped conjugate fiber as the thermoplastic fiber in Kobayashi. One of ordinary skill in the art would have been motivated to employ a crimped, conjugate fiber in order to enhance the bonding of the cellulosic fibers in the sheet.

4. Claims 2 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi in view of Laun as applied to claims 1, 3-8, 13-16 above, and further in view of WO 01/52713 to Kakiuchi et al.

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Kobayashi does not teach employing an aqueous detergent comprising an electrolyte to impregnate the sheet. Kakiuchi et al teaches that cleaning sheets such as nonwoven fabrics and papers can be impregnated with an aqueous detergent in order to enhance the cleaning ability of the sheet. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have impregnated the sheet of Kobayashi with an aqueous detergent, as taught b Kakiuchi et al, motivated by the expectation that this would enhance the cleaning ability of the sheet.

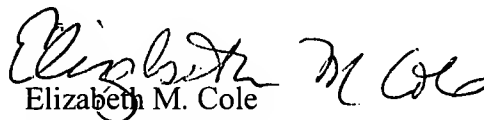
5. Applicant's arguments with respect to claims 1-11, 13-16 have been considered but are moot in view of the new ground(s) of rejection.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (703) 308-0037. The examiner may be reached between 6:30 AM and 5:00 PM Monday through Thursday.

Mr. Terrel Morris, the examiner's supervisor, may be reached at (703) 308-2414.

Inquiries of a general nature may be directed to the Group Receptionist whose telephone number is (703) 308-0661.

The fax number for official faxes is (703) 872-9310. The fax number for official after final faxes is (703) 872-9311. The fax number for unofficial faxes is (703) 305-5436.


Elizabeth M. Cole
Primary Examiner
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December 3, 2002